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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,893	09/04/2003	Troy Simmons	43789-268902	1534
826	7590	11/02/2005	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			DANIELS, MATTHEW J	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,893

Applicant(s)

SIMMONS ET AL.

Examiner

Matthew J. Daniels

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claim 12 is withdrawn in view of the newly discovered reference(s) to Grundy (USPN 2120742) and Rotter (USPN 5326318). Rejections based on the newly cited reference(s) follow. This action is **Non-Final**.

Priority

2. This application is a continuation in part of 10/347,663. The Examiner submits that the following portions of the claims do not have support in the '663 application, and are accorded the filing date of 4 September 2003:

Claim 12: “pair of breakage channels configured to facilitate breakage of the second tile shape into three sections,” “differing lengths,” “installing” in the claimed configuration, and “attaching” in the claimed configuration

Claim 13: “pair of breakage channels configured to facilitate breakage of the second tile shape into three sections,” “differing lengths,” “installing” in the claimed configuration, and “attaching” in the claimed configuration

Claim 14: “pair of breakage channels configured to facilitate breakage of the second tile shape into three sections,” “differing lengths,” “installing” in the claimed configuration, and “attaching” in the claimed configuration

Specification

3. The abstract of the disclosure is objected to because it contains multiple punctuation and grammatical errors. Correction is required. See MPEP § 608.01(b).

Double Patenting

4. The express abandonment under 37 CFR 1.138 of application 10/347,663 is present in the file for that application. It is noted that the application has been abandoned without favor of a continuing application. Because the application is no longer copending, rejections set forth previously under this section are withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 12-14** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: breaking of the tile along the breakage channels.
6. **Claims 12-13** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 12 and 13 are drawn to the creation of three sections, two of which simulate mission-shaped tiles. It is unclear and indefinite which two of the three simulate the mission shaped tiles. Additionally, in an S-shaped tile that is broken, the Examiner submits that

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all three portions simulate mission-shaped tiles. Therefore, it appears to be unclear and indefinite which is to be placed atop the cap portion of the S-shaped tile because two of the three parts could be the “shorter” mission-shaped tile.

7. **Claims 12-14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the Examiner and indefinite a) which portion of the first tile is intended to be the cap portion, and b) in what configuration the shorter of the two mission-shaped tiles is installed on the cap portion.

8. **Claims 15-16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner has considered the claims in light of the specification (Page 7, lines 18-33), but can find no clear definition or description of a “slipper.” In the instant claims, it is unclear and not distinctly claimed what the Applicant intends to be defined as a “slipper.”

Claim Rejections - 35 USC § 102

9. Rejections set forth previously under this section are withdrawn in view of the cancellation of Claims 1-11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Rejections set forth previously under this section are withdrawn in view of the cancellation of Claims 1-11.

11. **Claims 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wotherspoon (USPN 3349534) in view of Grundy (USPN 2120742), Rotter (USPN 5326318), and Chaffee (USPN 1993086). **As to Claim 12**, Wotherspoon provides a roof structure by use of a first tile shape having a generally "S"-shaped transverse cross section (Fig. 4) and including a cap portion (Fig. 4, Item 18). Wotherspoon is silent to the other claimed limitations, namely a) a tile mold, b) a second tile shape including a pair of breakage channels configured to facilitate breakage of the second shape into three sections, and c) installing a first shape atop a supporting structure and attaching the shorter of the two-mission shaped tiles atop the cap portion of the S-shaped tile. However, Grundy, Rotter, and Chaffee teach the following:

- a) Chaffee teaches a tile mold for providing a first tile shape (Page 2, column 1, lines 25-55).
- b) Grundy teaches tiles produced with lengthwise grooves for breaking a clay element into three different slabs (Page 1, right column, lines 37-45) and transverse grooves for breaking each slab into smaller pieces when it is desired to form smaller tiles (Fig. 1, Item 4 and Page 1, right column, lines 37-45).

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c) Rotter teaches that it is known to place a first tile shape atop a supporting structure (Fig. 1, Item 18) and attaching a shorter mission shaped tile having a generally “C”-shaped transverse cross section atop the cap portion of the first tile shape (Fig. 1, Item 30).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Chaffee, Grundy, and Rotter into that of Wotherspoon in order to provide a shingle that simulates expensive tiles (Chaffee, Page 2, left column, lines 44-47), provide extra cleavage lines when it is desired to form smaller tiles (Grundy, Page 1, right column, lines 37-45), and to provide a capping element to cover the slot between two top rows or tiles on each side of the roof thereby deflecting rain down the slope of the roof and keeping out dirt, and pests (5:1-21). **As to Claim 13**, Wotherspoon provides a roof structure by use of a first tile shape having a generally “S”-shaped transverse cross section (Fig. 4) and including a cap portion (Fig. 4, Item 18). Wotherspoon is silent to the other claimed limitations, namely a) a tile mold, b) a second tile shape including a pair of breakage channels configured to facilitate breakage of the second tile shape into three sections, two of which simulate mission-shaped tiles having a generally “C”-shaped transverse cross section having differing lengths, and c) installing the first shape atop a supporting structure and attaching one of the two mission shaped tiles atop the cap portion of the S-shaped tile. However, Grundy, Rotter, and Chaffee teach the following:

a) Chaffee teaches a tile mold for providing a first tile shape (Page 2, column 1, lines 25-55)..

b) Grundy teaches tiles produced with lengthwise grooves for breaking a clay element into three different slabs (Page 1, right column, lines 37-45) and transverse grooves for breaking each slab

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into smaller pieces when it is desired to form smaller tiles (Fig. 1, Item 4 and Page 1, right column, lines 37-45).

c) Rotter teaches that it is known to install a first tile shape atop a supporting structure (Fig. 1, Item 18) and attaching a mission shaped tile having a generally "C"-shaped transverse cross section atop the cap portion of the first tile shape (Fig. 1, Item 30).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Chaffee, Grundy, and Rotter into that of Wotherspoon to provide a shingle that simulates expensive tiles (Chaffee, Page 2, left column, lines 44-47), provide extra cleavage lines when it is desired to form smaller tiles (Grundy, Page 1, right column, lines 37-45), and to provide a capping element to cover the slot between two top rows or tiles on each side of the roof thereby deflecting rain down the slope of the roof and keeping out dirt and pests (5:1-21). As to Claim 14, Wotherspoon provides a roof structure by use of a first or second tile shape (both being the same) having a generally "S"-shaped transverse cross section (Fig. 4) and including a cap portion (Fig. 4, Item 18). Wotherspoon is silent to the other claimed limitations, namely a) a tile mold, b) a second tile shape including a pair of breakage channels configured to facilitate breakage of the second shape into three sections, and c) installing a first shape atop a supporting structure and attaching one of the three sections of the second tile shape atop the cap portion of the S-shaped tile. However, Grundy, Rotter, and Chaffee teach the following:

a) Chaffee teaches a tile mold for providing a first tile shape (Page 2, column 1, lines 25-55).

b) Grundy teaches tiles produced with lengthwise grooves for breaking a clay element into three different slabs (Page 1, right column, lines 37-45) and transverse grooves for breaking each slab

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into smaller pieces when it is desired to form smaller tiles (Fig. 1, Item 4 and Page 1, right column, lines 37-45).

c) Rotter teaches that it is known to install a first tile shape atop a supporting structure (Fig. 1, Item 18) and attaching a mission shaped tile having a generally “C”-shaped transverse cross section atop the cap portion of the first tile shape (Fig. 1, Item 30).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Chaffee, Grundy, and Rotter into that of Wotherspoon to provide a shingle that simulates expensive tiles (Chaffee, Page 2, left column, lines 44-47), provide extra cleavage lines when it is desired to form smaller tiles (Grundy, Page 1, right column, lines 37-45), and to provide a capping element to cover the slot between two top rows or tiles on each side of the roof thereby deflecting rain down the slope of the roof and keeping out dirt and pests (5:1-21).

12. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wotherspoon (USPN 3349534) in view of Grundy (USPN 2120742), Chaffee (USPN 1993086), and Fifield (USPJN 5743059). As to **Claim 15**, Wotherspoon provides a first or second tile shape, each being an “S”-tile shape having a “cap” portion and a “pan” portion (Fig. 4). Wotherspoon is silent to the other claimed limitations, namely a) a tile mold, b) a separation channel and breaking along the separation channel, and c) a first and second tile shape. However, Grundy, Chaffee, and Fifield teach the following:

a) Chaffee teaches a tile mold for providing a first tile shape (Page 2, column 1, lines 25-55).

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b) Grundy teaches tiles produced with lengthwise grooves, which are interpreted to be separation channels, for breaking a clay element into three different slabs (Page 1, right column, lines 37-45).

c) Fifield teaches that multiple shapes of slippers (5:23-30, Figs. 6a-6f, and 1:51-65) are known and interchangeable for shaping the top surface of the tiles (Abstract) without changing the bottom surface.

In the combined method, it would have been obvious over Fifield's method to provide multiple slipper shapes to provide a desired tile appearance or functionality. It would have been further obvious over Grundy's method to provide slippers with lengthwise grooves to provide separation channels when it is desired to form smaller tiles (in length or in width), such as at the end of a roof when half of Wotherspoon's tile overhangs the edge of the roof. Chaffee further teaches that shaping of tiles with a mold is known and obvious in the art. Breakage of Wotherspoon's tile would provide a "cap" shape and a "pan" shape.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Chaffee, Grundy, and Fifield into that of Wotherspoon to provide a shingle that simulates expensive tiles (Chaffee, Page 2, left column, lines 44-47), to provide extra cleavage lines when it is desired to form smaller tiles (Grundy, Page 1, right column, lines 37-45) at the edge of a roof, and to change the contoured appearance of the upper surface of tiles without changing the under surface of the tiles (Fifield, Abstract, last four lines) to provide particular aesthetic or functional characteristics (Fifield, columns 5-6).

13. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wotherspoon (USPN 3349534) in view of Chaffee (USPN 1993086) and Fifield (USPJN 5743059). As to **Claim 16**, Wotherspoon provides a first or second tile shape (which are the same), each being an “S”-tile shape (Fig. 4) having a simulation interface channel (Fig. 4, Item 25) such that the S-tile shape simulates two mission-shaped tiles each having a generally “C”-shaped transverse cross section (2:54-58). Wotherspoon is silent to the claimed limitation drawn to first and second slippers and to a tile mold. However, Chaffee and Fifield teach the following:

- a) Chaffee teaches a tile mold for providing a first tile shape (Page 2, column 1, lines 25-55).
- b) Fifield teaches that multiple shapes of slippers (5:23-30, Figs. 6a-6f, and 1:51-65) are known and interchangeable for shaping the top surface of the tiles (Abstract) without changing the bottom surface.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Chaffee and Fifield into that of Wotherspoon to provide a shingle that simulates expensive tiles (Chaffee, Page 2, left column, lines 44-47), and to change the contoured appearance of the upper surface of tiles without changing the under surface of the tiles (Fifield, Abstract, last four lines) to provide particular aesthetic or functional characteristics (Fifield, columns 5-6).

Response to Arguments

14. Applicant's arguments with respect to claims 12-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Thursday, 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJD 10/26/05



**MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER**